

the whole, a larger bird than the species at present under consideration ; both species are remarkable for the richness and the peculiar Paradiseine form of their plumage ; they resemble each other closely, but may at once be distinguished by the greater size of *L. Victoriae*, and the greater extent of white on the rectrices of *L. Klinesmithi*, in which latter species the white extends over the whole of the centre two tail-feathers, except a narrow margin at the extreme tip. *Lamprolia Victoriae* (Finsch) is found on Taviani, the present species on Vanna Levu, an adjacent and one of the largest islands of the Fiji group. Respecting its habitat, Mr. Klinesmith remarks : " They live in the interior part of the country, and only in certain spots in the high but damp ranges ; in dry and rocky parts they are not seen at all." " They are very scarce, and extremely hard to find" ; their " stomachs contained insects."

I have named this new bird after its discoverer, to whom we are indebted for the knowledge of at least two of the most beautiful and remarkable birds yet discovered in Fiji, and I doubt not that his researches will bring to light many more new and beautiful acquisitions.

Mr. RAMSAY exhibited specimens of most of the birds described in these papers ; also some beautifully prepared skins of birds from the collection obtained in New Britain, before mentioned.

Mr. E. PIERSON RAMSAY on the avifanna of Fiji—

Remarks on a Collection of Birds lately received from Fiji, and now forming part of the MACLEAYAN Collection, at Elizabeth Bay ; with a list of all the Species at present known to inhabit the Fiji Islands—by E. P. RAMSAY, F.L.S., &c., &c.

1.—ASTUR RUFITORQUES, Peale, *U.S. Expl. Expd. pl. 2 f. 2.*

This appears to be the commonest species, and is found throughout the group.

2.—*COLOCALIA SPODIOPYGIA*, Peale, *U.S. Expl. Exped. pl.* 49 *fig.* 5.

Cypselus terræ-reginæ, Ramsay, *P. Z. S.*, 1874 pt. IV.

This species has a very extended range, being found dispersed over the whole of the South Sea Islands, and as far north as the north-east coast of Queensland where I obtained specimens in 1874. The Queensland birds have the bill a little larger and stronger, but do not appear to differ much in any other respects. The eggs are three or four in number snow white, in length 0·7 inch by 0·5 in width. The birds breed during October and November.

3.—*TODIRAMPHUS VITIENSIS*, Peale.

One of the most common species in Fiji, probably only a variety of *T. (Haleyon) SACRA*.

4.—*MYZOMELA JUGULARIS*, Peale.

The specimens from Kandavu, of this pretty species, I find to be more highly coloured than those from other localities, the crimson on the head moreover, is of a greater extent.

5.—*PTILOTTIS PROVOCATOR*, E. L. Layard, *P. Z. S.*, 1875, *pt. I. p.* 28.

Common at Kandavu.

6.—*PTILOTTIS CARUNCUTATA*, Forst ; Finsch and Hartl. *Cent. Polynes. t.* 5 *fig.* 28.

This specimen is a young bird obtained at the Island of Fortuna.

7.—*ZOSTEROPS CÆRULESCENS*, Lath.
Gould Birds of Austr. IV. pl. 31.

I have examined the Fiji specimens carefully, and compared it with a large series from various parts of Australia, it differs *only* in having a slightly larger and stronger bill, with the culmen a little more arched and in the tail being longer. In plumage the specimen from Kandavu and the N. S. Wales birds are nearly *exactly alike*, but the yellow on the throat extends a little further down than in the generality of the N. S. Wales' specimens, and the olive yellow on the back of the neck is of greater extent and ends further down than opposite the yellow of the throat. I do not consider these differences sufficient for the foundation of a separate

species, but this variety, if not identical with *Z. flaviceps*, may be distinguished under the name of *kandavensis*.

Var. *kandavensis*.—*Adult*: Plumage same as in *Z. cærulescens*, but the yellow from throat extending slightly on to the chest, the tail is much longer, bill horn-brown; legs light brown. Total length, 4·2 inches; tail, 2; wing 2·35; tarsus 0·7; bill, from forehead 0·5; from gape 0·55; from nostril 0·3.

Mr. E. L. Layard, F.Z.S., H. B. M. Consul at Levuka, mentions in the Proceedings of the Zoological Society (P. Z. S., 1875, pt. I p. 29), another species of *Zosterops* found at Kandavu, but which he had not had an opportunity of describing; he proposed for it the name of *Z. explorator*, and states it may be distinguished from *Z. flaviceps* of Peale, "by being yellow from the chin to the abdomen, and without the ash colour collar." I regret to say I have not seen a specimen of *Z. flaviceps* nor can I find any description of it in any of the Works at my disposal.

8.—*VITIA RUFICAPILLA*, Ramsay, *P. Linn. Soc. N.S.W.*, 1875,
For description and remarks. See *ante* page 42.

9.—*PETROICA PUSILLA*, Peale.

The Kandavu variety of this species has the white cap on the head of a greater extent, and the crimson of a brighter tint. The features are on the whole more distinct than in the usual forms of *P. pusilla*.

10.—*ARTAMUS MENTALIS*, Jard.

Artamus vitiensis is merely a variety of this species. The birds are not rare, and are usually found in the more open parts of the forest.

11.—*MYIAGRA RUFIVENTRIS*, Elliott.

Two specimens of this well marked species are all that were obtained, it does not appear to be a common bird.

12. MUSCULVA LESSONI, *G. R. Gray.*

This is a very common species throughout the Fiji group. Its habits and actions resemble those of our brown flycatcher, *Micræca fascians*.

(13.—RHIPIDURA PERSONATA, *Ramsay, P. Linn. Soc. N.S.W.*)

For description and remarks. See *ante* page 43.

14.—CAMPEPHAGA MACULOSA, *Peale.*

Two specimens only obtained, one stated to be a male but probably a female, it is not quite adult, the locality marked on the label attached, is "Batiki", Fiji. The second specimen is evidently an adult male, has the throat, chest, and breast pure white, with only slight remains of cross-bars on the feathers on sides of the chest and neck; in size it is slightly smaller. This species is probably identical with *Lalage terat* (*Cass*) and *L. orientalis* (*Hartlb.*)

15.—MYIOLESLES VITIENSIS, *Hartl. Ibis*, 1866, p. 173.

This species appears to be common everywhere in the dense serubs.

16.—PACHYCEPHALA VITIENSIS, *G. R. Gray.*

I can find no description of *Pachycephala vitiensis* at present, and am not quite sure that I have assigned the correct name to these specimens.

17.—PACHYCEPHALA KANDAVENSIS, *Ramsay, P. Linn. Soc. of N.S.W.*, 1875. See *ante* page 65.

I believe this to be quite distinct from any hitherto described species, although closely allied to *P. gutturalis* and *P. vitiensis*.

18.—PACHYCEPHALA GRÆFFEL.

There are two females in the collection which agree very well with *P. optata* of Hartlaub, a synonym of this species.

- 19.—MERULA RUFICEPS, *Ramsay, P. Linn. Soc. N.S.W.* See *ante* page 43.

This fine species was obtained at Kandavu to which district I believe it is confined—its habits and actions and nidification are similar to other species of *Merula*.

- 20.—APLONIS CASSINI, *Peale, U.S. Expl. Exped.* pl. 7. 1.

This is very common in Fiji and seems dispersed all over the group.

- 21.—AMBLYNURA PEALEI, *Hartlaub.*

Probably a local variety of *A. CYANOVIRENS*, *Peale.* of which *Lobiospiza notabilis* of Hartlaub and Finsch, is the young.

There are three specimens in the collection, including a young bird which has the blue and yellow carunculae at the base of the lower mandible and round the gape well developed.

- 22.—PLATYCERCUS SPLENDENS, *Hartl. and Finsch.*

Only one specimen of this fine species appears to have been obtained, although the birds are by no means rare, and found throughout the group.

This species may be easily distinguished from *P. hysginus* by having a bright blue collar round the back of the neck, in some very old specimens this collar becomes at least two inches in width. I have lately examined a bird of this species, in which a streak of white was conspicuous along, and on either side of the shaft of the quills of the wings and tail feathers; the crimson of the head and under surface is much brighter in tint than in either *P. hysginus* or *P. tabuensis*.

- 23.—PLATYCERCUS PERSONATUS, *G. R. Gray.*

This, one of the most common species in Fiji, appears to be somewhat nocturnal in its habits. I have noticed specimens in confinement particularly drowsy during the day time, but when liberated at night, wander about the house, talking and chattering incessantly. In Fiji, they prove very destructive to the crops.

24.—DOMICELLA SOLITARIUS, *Latham*.

This is perhaps one of the most beautiful birds of the South Sea Islands, and appears to be very plentiful in the Fiji group, several specimens of both sexes in the collection.

25.—TRICHOGLOSSUS AMABILIS, *Ramsay, P. Linn. Soc., N.S.W.*

See *ante* page 36.

A beautiful little species obtained for the first time I believe, at Fiji, by Charles Pearce, 17th June last, 1875, and described at one of our previous meetings (July 26th), after which, the description was published in the *Herald's* report of the meeting on the 28th of the month; having lately heard that the same species has been since described, I take the present opportunity of giving the exact date of my description of it.

26.—CUCULUS (*Cacomantis*) SIMUS, *Peale*.

C. infuscatus (*Juv.*), *Hartl., Ibis*. 1866, p. 172.

The collection contains both the young and adult of this species, from which it appears to me that *C. infuscatus* of *Hartl.* is merely the young; after losing the fuscous hue of the under surface, the young birds become barred with bracket-shape and broad wavy lines of dull white, which are tinged with rufous on the throat, chest, and sides of the neck; there are also remains of pale rufous margins to the feathers on the interscapular region; on the rump and upper tail-coverts faint margins of dull white are visible. In the adult the tail becomes strongly barred, and the under surface of the body of a rufous tint. *C. simus* (*Peale*), is represented in Australia by *C. castaneiventris* of *Gould*, which is about the same in size.

27.—PTILINOPUS MARLÆ, *Homb. and Jacq. Voy. Pole, Sud. t. 29, 2.*
P. perousei; of *Hartlaub*.

This species does not appear to be rare and is known as the nutmeg dove by the letters in Fiji, the native name is Saukula.

28.—CHRYSÆNA LUTEOVIRENS, *Homb. and Jacq. Voy. Pole, Sud. t.*
12 —1, 2.

Gouldii, *Birch*; *flava*, *G. R. Gray*.

Feliciæ, *Homb. and Jacq. (female)*.

29.—*CHRYSÆNA VICTOR*, Gould, *P.Z.S.*, 1871, p. 642.

There seems to be considerable confusion in the minds of some, respecting the females of this and the foregoing species, and indeed also with respect to the males.

Mr. E. L. Layard, H.B.M. Consul at Fiji remarks in the *P. Z. Soc.*, 1875, *pt. I. p.* 30, as follows :—"Professor Von Suhm, of the Challenger and I, after going carefully into the subject, have come to the conclusion that the 'Orange Dove' of Savinni (Taviuni), and Lanthala (*Chrysæna victor*, Gould), is a phase of plumage of the 'Green Dove' (*C. luteovirens*)."!! All I can say is, that there is not the slightest probability of such being the case, as anyone looking a little deeper "into the subject" than the colouration of the plumage, would at once perceive; the peculiar form and texture of the feathers of *C. luteovirens*, and the long plume like upper tail-coverts and extensive tail of *C. Victor*, could hardly be produced by the same species at the same period of the year, the only way I can account for Mr. Layard's strange remark is by presuming that he mistook the male of *C. viridis* for *C. luteovirens*, both of these birds having plumage of a similar texture.

30.—*CHRYSÆNA VIRIDIS*, E. L. Layard, *P Z S.*, *pt. II.*, 1875, p. 151.

This fine and very distinct specimen was discovered during the cruise of the "Challenger" among the Fiji group, and subsequently obtained by Mr. E. L. Layard, at Kaudavu, who describes the male in the proceedings of the Zoological above quoted (1875, II. p. 151). The female is not unlike the same sex of *C. victor* and of *C. luteovirens*, but is at once distinguished by its short tail, and may thus be described.

Adult female.—The whole of the upper and under surface deep dark green, paler on the sides of the face and throat, with a yellowish tinge on the latter; the abdomen and flanks dull pale green with greyish margins to the feathers; central portion of the abdomen and region round the vent, dull whitish grey; legs brown tinged with green; under tail-coverts and a narrow line round the inner rectrices, pale yellow; under surface of the tail, dark brown; upper surface, deep bright green on the outer margins and tips,

dull blackish towards the base of the inner webs, two centre feathers green, becoming blackish brown at the base; upper tail coverts, bright green; quills above, blackish brown, primaries margined narrowly with golden yellow, secondaries broadly with green on the outer webs; wing coverts above, green; the basal portion, blackish brown; under surface of the quills, blackish brown; the outer webs narrowly, the inner rather broadly margined with yellow; under wing coverts, brown washed with at tips and margined, with yellow; the margins of the shoulders tinged with green; bill olive green; legs and feet bluish, tinged with red. Total length, $6\frac{1}{2}$ inches; wing, 4.4; tail, 2.2; tarsus, 0.85; bare portion, 0.3; bill from forehead, 0.65; from the anterior margin of nostril to tip, 0.3; from gape, 0.8.

The collection contains a fine series of the young and adults of both sexes, all obtained at Kandavu, to which place this species seems confined.

31.—CARPOPHAGA LATRANS, *Peale, U.S. Expl. Exped. pl.* 26.

32.—CARPOPHAGA (*Janthænas*) VITIENSIS, *Quoy and Gaim, Voy. Astrol. t.* 28.

The young of this species resembles the adult generally, but is not so brightly coloured or so distinctly marked. *Adult*, cere and base of the bill, crimson; tip, horn colour; legs, crimson—iris brown.

33.—CHARADRIUS LONGIPES, *Temn.*

C. fulvus, p. ; Hartl. and Finsch.

34.—LIMOSA UROPYGIALIS, *Gould, B. Aust. VI., pt.* 29.

This species appears to be plentiful.

35.—TOTANUS INCANUS, *Gmel.*

A very common species.

36.—ORTYGOMETRA TABUENSIS, *Gmel.*

Porzana vitiensis, Hartl.

Only one specimen obtained; this species seems to have an immense range of habitat being found all over Australia, Tasmania, New Zealand, and the Tropical Islands of the South Seas. Bill, black; legs and feet, yellow—iris red.

37.—ANOUS LENCOCEPHALUS, *Gould, B. Aust.* VII. pt. 33.

One specimen only obtained.

The remaining species catalogued from Fiji recorded in Grey's Hand-book of Birds, &c., &c., are—

1. *Circus gouldii*, *Bp.*
2. *Strix lulu*, *Peale.*
3. *Hirundo tahitica*, *Gml.*
4. *Myzomela nigriventris*, *Peale.*
5. *Ptilotis procerior*, *Hartl. and Finsch.*
6. *Zosterops flaviceps*, *Peale.*
7. *Zosterops explorer*, *E. L. Layard, P.Z.S.*, 1875, pt. I. p. 29.
8. *Lamprolia victoriæ*, *Hartl. and Finsch, P.Z.S.*, 1873, p. 733.
9. *Lamprolia klinesmithii*, *Ramsay, P. Linn. Soc. N.S.W.* 1875, page 68.
10. *Tatara ? viridis*, *E.L. L., P.Z.S.*, 1875, II. p. 150.
11. *Myiagra azureocapilla*, *E.L.L., Ms. s.*
12. *Rhipidura albogularis*, *E. L. L., P.Z.S.*, 1875, pt. I. p. 29.
13. *Lalage nigrogularis*, *E.L. L., P.Z.S.*, 1875, pt. II. p. 149.
14. *Myiolestes henlei*, *Hartl. and Finsch.*
15. *Myiolestes macrorhyncha*, *Hartl. & Finsch., P.Z.S.*, 1859, p. 157.
16. *Pachycephala graffei*, *Hartl. Ibis.*, 1866, p. 172.
17. *Pachycephala torquata*, *E.L. L., P.Z.S.*, 1875, pt. II. p. 150.
18. *Pachycephala macrorhyncha*, *E. L. L., P.Z.S.*, 1875, pt. II. p. 150.
19. *Aplonis cenerascens*, *H. and F., P.Z.S.*, 1871, p. 29.
20. *Platycercus hisginus*, *Forst.*
21. *Platycercus tabuensis*, *Gml.*
22. *Platycercus taviuniensis*, *E.L.L., M.S.S.*
23. *Ptilinopus porphyraceus*, *Forst.*
24. *Phlegænas starrii*, *G. R. Gray, P.Z.S.*, 1856, pl 115.
25. *Hypotenedia philippensis*, *L.*
26. *Porphyrio vitiensis*, *Peale.*
27. *Dendrocygna vagans*, *Eyton.*
28. *Anas superciliosa*, *Gml.*

29. *Ardea* (*Butoroides*) *Javanica*. ; *E.L.L., P.Z.S.*, 1865, *p.* 29.
30. *Fulmarus* *cærulens*, *Gmel., I.S.A.Z.*, *pt.* 44.
31. *Fulmarus* *macgillivrayi*, *G. R. Gr.*
32. *Sterna* *melanauchen*, *Gould, B. Austr.* VII. *pt.* 26.
33. *Sterna* *novæ-hollandiæ*, *Cuv., Gould, B. Austr.*, VII. *pt.* 24.
34. *Sterna* *melanauchen*, *Tem. Gould, B. Austr.* VII. *pt.* 28.
35. *Gygis* *candida*, *E. L. L., P.Z.S.*, 1875, *pt. I. p.* 29.
36. *Anous* *stolidus*, *Linn.*
37. *Tachypetes* *aquila*. ; *E.L.L., P.Z.S.*, 1875, *pt. I. p.* 29.

As far as we have records, then, the Avifauna of Fiji consist of about 74 described species, of which, I have no doubt, several will eventually prove to be mere local varieties of S. S. Island forms, the great scarcity of the Accipitres or birds of prey is noticeable, but this fact is not very remarkable when we remember the paucity of bird-life in general, and the few mammals which inhabit these islands; but it is somewhat surprising to find so few sea birds recorded; from the immense numbers of fish both specifically and individually which frequent these islands, one would naturally expect to find more than eight species frequenting the shores.

I cannot pass over this collection without drawing attention to the beautiful and varied forms of fruit eating doves which inhabit the islands, particularly the beautiful and remarkable plumaged *Chryssienæ*, a peculiar and well marked genus allied to (but very distinct from) *Ptilinopus*; *Ch. luteovirens* has been long known to science, but only of late years has it been otherwise than extremely rare in collections—*Ch. victor* first described by Mr. Gould, is perhaps, one of the most beautiful birds of its tribe, while lately, during the cruise of H.M.S. "Challenger", a third species *Ch. viridis* has been discovered, and lately described by Mr. E. L. Layard, M.B.M. Consul at Fiji; from information I have lately received I feel convinced that a fourth species will yet be found belonging to this remarkable genus.

The peculiar *PHLEGÆNAS STAIRII*, *G. R. Gray*; seems to take the place of our ground or scrub pigeon *Chalcophaps chrysochlora*, but appears to be very rare. Another feature in the Fiji Avifauna, well worthy of notice, is the lately discovered Passerine form,

Lamprolia, which seems to vie with our Rifle-birds (*Ptiloris*) in brilliancy of plumage. Of this we know two species, closely allied but quite distinct; both remarkable for the silky snow-white plumage of the upper tail coverts and central portion of the tail feathers, and the black, glossy, steel-blue-tinged plumage of the remaining parts. The larger of these birds, *Lamprolia victoriæ*, I have not seen. The smaller, which I have named after its discoverer Mr. Klinesmith—*L. klinesmithii*—I have already exhibited this evening.

Since the above was written Mr. E. L. Layard's list of Fiji Island Birds has come to hand (P.Z.S., pt. III., 1875, p. 423), which enables me to add the following species with some remarks upon them:—

ASTUR CRUENTUS; *Gould.*

This will doubtless prove to be *A. rufitorques* of Peal, and not the true *A. cruentus* of Gould.

CIRCUS ASSIMILIS, *Jard.* and *Selb.*

Most probably *C. gouldii*, *Bp.*

STRIX DELICATULA, *Gould.*

Evidently *S. lulu*, of Peale, a smaller allied species.

ENDYNAMYS TATIENSIS (*Sparrm.*)

Highly doubtful, and not seen by Mr. E. S. Layard.

CHALCITES, *sp. inc.*

Given on the authority of Mr. Thurston.

CAPRIMULGUS, *sp. inc.*

Given on authority of natives only.

COLLOCALIA VANICORENSIS, *Q.* and *Gaim.*

Given on authority of Hartlaub and Finsch.

APLONIS TABUENSIS, *Gml.*

Most likely *A. cassinii*, (*Peale.*)

CARPOPHAGA PACIFICA, *Gml.*

This is *C. microcera*, (*Bp.*) *Ic. P. t.* 36: or probably *C. pacifica*, p.; Hartlaub and Finsch; Mr. E. L. Layard does not say whether

he has seen anything more of it than the eggs, which he describes. If it is the true *C. pacifica*. (*Gmel.*) Fiji is certainly a new locality for the species which is reported to be from Tonga.

ORTYGOMETRA QUADRISTRIGATA, *Horsf.*

Not seen by Mr. Layard, but evidently given on the authority of Hartl. and Finsch.

STREPSILAS INTREPES, *Linn.*

One obtained by Mr. Layard at "Navua" on Viti Levu.

ARDEA SACRA, *Gml.*

"Common all over the country among the mangroves." E. L. L. Syn. *Ardea* (*Demigretta*) *gularis* (*Forst.*), and *A. greyi* *Gould.*

STERNA BERGHII, *Licht.*

Syn. *S. cristata*, (*Steph.*)

STERNA LONGIPENNIS, *Nordm.*

Syn. *S. frontalis* (*G. R. Gr.*), probably *S. melanorhyncha*, *Gould.*

STERNA PANAYA, *Gmel*

Syn. *Hydrochelidon panayensis*; *Anous leucocapillus*, *Gould*

PUFFINUS NUGAX, *Sol.*

Mr. E. L. Layard does not say whether he saw this species or not, or merely gave it on the authority of Hartl. and Finsch.

PHAETON ÆTHEREUS, *Linn.*

From the context it is evident Mr. E. L. Layard meant *P. rubricauda*, (*Bodd.*) of which *P. æthereus* (*Bl.*) is a synonym; Mr. E. L. Layard does not appear to be quite sure about the identity of this species.

DYSPORUS SULA, *Linn.*

This is I presume *Sula fiber* of Linn; but more probably *Sula serrator* Bks., *S. australis*, *Gould B. Austr. VII. pl. 76.*

Notwithstanding the slight differences in the nomenclature which has evidently arisen from the want of books for reference, Mr. E. L. Layard's paper contains much new matter, and some valuable information on the habits of the avifauna of the group.